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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/191,702	11/13/1998	JEFFREY K. O'HAM	PMS251910	8926

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EXAMINER

LEUNG, JENNIFER A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/191,702

Applicant(s)

O'HAM, JEFFREY K.

Examiner

Jennifer A. Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,7,8,10-12,14,15,17-19,36,38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7,8,10-12,14,15,17-19,36,38 and 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 21, 2003 has been entered.

Response to Amendment

2. Applicant's amendment submitted on July 21, 2003 has been received and carefully considered. Claims 3, 4, 6, 9, 13, 16, 20-35 and 37 are cancelled. Claims 1, 2, 5, 7, 8, 10-12, 14, 15, 17-19, 36, 38 and 39 remain active.

Response to Arguments

3. Applicant's arguments filed on July 21, 2003, with respect to the rejection of the pending claims under 35 U.S.C. 103(a) as being unpatentable over Kant (US '494) in view of secondary references, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection are made in view of newly found prior art references.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 2, 7, 8, 14, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Derr (US 1,869,844).

Regarding claims 1, 17 and 18, Derr (FIG. 1-4) discloses an apparatus comprising: a permanently mounted vessel having an interior (i.e., chamber 2 defined by refractory and insulating brick), comprising one or more removable trays (i.e., removably disposed baskets 14; page 3, first column, lines 1-9 and 45-47), said trays 14 comprising peripheral sidewalls and a bottom part 15 capable of supporting matrices and structured as to define orifices in the bottom (i.e., basket 14 being formed of sheet metal sides and ends, suitably reinforced, and having a foraminous base); a manifold for removal of gases positioned on top of the vessel 2 (i.e., valved conduit 23, branches 24, 25, manifolds 26, 28; FIG. 4; page 3, first column, lines 31-42); and a means for heating the interior (i.e., burners 13; page 2, second column, lines 125-130), positioned in a manner to allow heat to enter the vessel 2 at a position below trays 14.

Regarding claim 2, Derr discloses means for generating a vacuum (blower 31; FIG. 4; page 3, second column, lines 70-79) connected to the manifold 24, 25, 26, 28 to withdraw gases.

Regarding claims 7 and 8, Derr discloses the bottom part 15 is screened or slotted (i.e., expanded metal on transverse supporting members 16; FIG. 2; page 3, first column, lines 1-18).

Regarding claim 14, Derr discloses the manifold comprises a heat resistant gasket touching the vessel 2 (i.e., rope packing seal 12; sealing medium in groove 9; page 2, lines 103-124; FIG. 2, 3).

Instant claims 1, 2, 7, 8, 14, 17 and 18 structurally read on the apparatus of Derr.

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5. Claims 1, 2, 5, 7, 8, 10, 14, 17, 19 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson et al. (US 5,325,795).

Regarding claims 1, 5 and 17, Nelson et al. discloses an apparatus comprising:

a vessel having an interior and comprising one or more removable trays (i.e., container **464**, defining a tray/vessel, being transportable via skid-mount **476**; column 31, lines 58-61), the vessel having peripheral sidewalls at least partly defined by the tray and a bottom part capable of supporting matrices and structured as to define orifices in the bottom (i.e., floor plate **576** with holes **579**; FIG. 31; column 34, line 34 to column 35, line 10); a manifold for removal of gases positioned on top of the vessel **464** (i.e., removable lid **470** having vapor outlet piping **526**, **466**; FIG. 24, 25, 28; column 33, lines 3-27); and a means for heating the interior (i.e., burner/blower assembly **462** for feeding heated air to the bottom of vessel/tray **464** via injection pipes **506**; FIG. 24, 25; column 32, lines 40-61).

Regarding claim 2, Nelson et al. discloses means for generating a vacuum (i.e., burner/blower assembly **462**; column 31, lines 36-68; FIG. 24, 25) connected to the manifold **470**, **526**, **466** for withdrawing gases.

Regarding claims 7 and 8, Nelson et al. discloses the apertured metal floor plate **576** comprises a number of holes **579**, or may comprise, "many other types of apertured floor structures that can withstand the loads anticipated," (FIG. 31; column 34, line 34 to column 35, line 10). Therefore, floor plate **576** is, inherently, screened or slotted.

Regarding claim 10, Nelson et al. discloses trays **464** have a loading capacity of at least about 2.5 cubic yards (column 32, lines 1-10).

Regarding claim 14, Nelson et al. discloses the manifold **470**, **526**, **466** comprises a heat

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resistant gasket touching the vessel **464** (i.e., packing rope **540** of seal assembly **530**; column 33, lines 28-48; FIG. 26, 27, 30).

Regarding claim 19, Nelson et al. discloses the manifold **470**, **526**, **466** is not attached to the vessel **464** (i.e., the lid **470** being “removable”; FIG. 24, 25; column 33, lines 3-27).

Regarding claim 36, Nelson et al. discloses the apparatus is mobile (i.e., mounted on readily movable skids **476**, **474**; transportable on a trailer on public highways; column 31, lines 33-61; column 32, lines 3-6).

Instant claims 1, 2, 5, 7, 8, 10, 14, 17, 19, and 36 structurally read on the apparatus of Nelson et al.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 11, 18 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US 5,325,795).

Regarding claims 11 and 39, Nelson et al. discloses vessel/tray **464** being integrally and rigidly mounted on skid **476**, comprising an H-beam **512** and lateral pipe **514** structure, to enable transport of the vessel/tray **464** from one locale to another, or onto a trailer (FIG. 25, 27; column 31, lines 58-61; column 32, lines 1-10; column 32, line 62 to column 33, line 2). As defined in the art, a “skid” is a pallet, or portable platform, used for loading or handling goods, especially one having solid sideboards and no bottom. Thus, vessel/tray **464**, inherently, comprises structural means for enabling transport by heavy-lifting machinery (i.e., a fork lift). Although Nelson et al. is silent as to whether the skid specifically comprises “pockets” for inserting a fork

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lift, it would have been an obvious design choice for one of ordinary skill in the art at the time the invention was made to provide any equivalent, suitable means for facilitating lifting of the tray **464** via heavy-lifting machinery in the apparatus of Nelson et al., since substitution of known equivalent structures involves only ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958).

Regarding claim 18, although Nelson is silent as to the apparatus shown in the embodiments of FIGs. 24-36 being permanently mounted, it would have been an obvious design choice for one of ordinary skill in the art at the time the invention was made to configure the apparatus to remain in a single location permanently (i.e., similar in concept to the *in situ* processing, shown in FIGs. 1-23), depending on the intended use of the apparatus, since permanently mounting a once portable apparatus involves ordinary skill in the art.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US 5,325,795), in further view of Sewell et al. (US 682,118).

Nelson et al. is silent as to a means for mechanically agitating the matrices, positioned in the interior and connected to the vessel **464**. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a mechanical agitating means to the vessel of Nelson et al., on the basis of suitability for the intended use, since it is well known in the art that agitation during heating facilitates the vaporization of contaminants present in the matrices, as evidenced by Sewell et al. In particular, Sewell et al. teaches an apparatus for the destructive distillation of contaminants present in garbage, i.e., soil, wherein the apparatus comprises receptacles **A**, each having a grate-bottom **D** and a stirrer-shaft **E** with arms

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E', whereby the garbage may be agitated during the distillation (page 1, lines 16-25, 46-76).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US 5,325,795), in further view of Schultz et al. (US 4,924,785).

Nelson et al. discloses it is undesirable to release contaminants into the atmosphere, and depending on the particular contaminant present, suitable recovery means may be provided. For example, Nelson et al. discloses that for low volatility contaminants, the vacuum manifold may further comprise a condenser, a charcoal absorber, or an incinerator for the recovery of the vaporized contaminants (column 26, lines 15-37). Although Nelson et al. is silent as to a recovery means comprising a 100 micron dry filter, it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide such to the apparatus of Nelson et al. on the basis of suitability for the intended use (i.e., for recovering particulates inherently entrained in the vaporized contaminants), since substitution of known equivalent structures involves only ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958). Schultz et al. evidences the conventionality of providing a filter for the recovery means by teaching an apparatus for pyrolyzing waste material, similar to the apparatus disclosed by Nelson et al. above, wherein the manifold (i.e., exhaust headers **82**, **120**; FIG. 5) connected to the top of the heated vessel having removable trays (i.e., baskets **50**; FIG. 5, 6; column 13, lines 3-17) further comprises a conventional scrubber or filter **121** (column 17, lines 55-61), to collect any volatiles present in the exhaust. Note that although a "100 micron dry filter" is not expressly taught, the use of such commercially available filters (i.e., high-efficiency, or HEPA filters) is well known in the art.

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9. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US 5,325,795), in further view of Nora et al. (EP 0 695 214).

Nelson et al. discloses the manifold portion **470** being of substantial weight (i.e., in the preferred embodiment, the lid **470** weighs about one ton), and further comprising integrally welded eyelets **527** for enabling lifting of the lid **470** off of container **464** (column 33, lines 3-27). Although Nelson et al. are silent as whether the lifting means may instead comprise a hydraulic cylinder positioned under the manifold, it would have been an obvious design choice for one of ordinary skill in the art at the time the invention was made to substitute equivalent, suitable means for facilitating lifting of the manifold portion **470** from the vessel/tray **464** in the apparatus of Nelson et al., since substitution of known equivalent structures involves only ordinary skill in the art. *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958). To evidence the conventionality of such lifting means, Nora et al. teaches an apparatus comprising a basket **C** having a casing **1** and cover **10**, wherein casing **1** and cover **10** are detachable from basket **C** by manner of a lifting means, preferably comprising pneumatic cylinders **12** (FIG. 5, 6, 7).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449.

The examiner can normally be reached on 8:30 am - 5:30 pm M-F, every other Friday off.

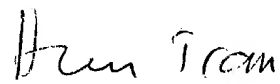
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for

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the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer A. Leung
February 5, 2004



HIEN TRAN
PRIMARY EXAMINER